

AMENDMENTS TO THE CLAIMS

Please cancel Claims 37-41, 44-46, and 50-66 without prejudice, as indicated below.

A complete listing of all claims is presented below:

1. (Previously Presented) A therapy apparatus for treating a patient's brain, the therapy apparatus comprising:

a light source having an output emission area positioned to irradiate a portion of the brain with an efficacious power density and wavelength of light, wherein the efficacious power density is between about 0.01 mW/cm² and about 100 mW/cm² at a depth of approximately 2 centimeters below the patient's dura; and

an element adapted to be interposed between the light source and the patient's scalp, the element adapted to inhibit temperature increases at the scalp caused by the light, wherein the element is adapted to apply pressure to at least a portion of the scalp, thereby blanching the portion of the scalp and decreasing absorption of the light by blood in the scalp.

2. (Original) The therapy apparatus of Claim 1, wherein the light passes through the element prior to reaching the scalp.

3. (Original) The therapy apparatus of Claim 1, wherein the element is adapted to contact the patient's scalp.

4. (Original) The therapy apparatus of Claim 3, wherein the element is attached to the light source and is adapted to conform to the scalp so as to position the light source relative to the scalp.

5. (Original) The therapy apparatus of Claim 4, wherein the element is mechanically adjustable so as to adjust a position of the light source relative to the scalp.

6. (Original) The therapy apparatus of Claim 4, wherein the element is mechanically adjustable so as to fit the therapy apparatus to the scalp.

7. (Original) The therapy apparatus of Claim 6, wherein the element comprises a bag containing a material adapted to conform to contours of the scalp.

8. (Original) The therapy apparatus of Claim 4, wherein at least a portion of the element is within an optical path of the light from the source to the scalp.

9. (Original) The therapy apparatus of Claim 8, wherein the element is substantially optically transmissive at the wavelength and is adapted to reduce back reflections of the light.

10. (Original) The therapy apparatus of Claim 9, wherein the element is adapted to fit to the scalp so as to substantially reduce air gaps between the scalp and the element in the optical path of the light.

11. (Original) The therapy apparatus of Claim 9, wherein the element comprises a material having a refractive index which substantially matches a refractive index of the scalp.

12. (Original) The therapy apparatus of Claim 11, wherein the material comprises glycerol.

13. (Original) The therapy apparatus of Claim 11, wherein the material comprises silica gel.

14. (Original) The therapy apparatus of Claim 1, wherein the element is adapted to cool the scalp by removing heat from the scalp.

15. (Original) The therapy apparatus of Claim 14, wherein the element comprises a conduit adapted to contain a coolant which flows through the conduit near the scalp, is heated by the scalp, and which flows away from the scalp.

16. (Original) The therapy apparatus of Claim 15, wherein the coolant circulates between the element and a heat transfer device, whereby the coolant is heated by the scalp and cooled by the heat transfer device.

17. (Original) The therapy apparatus of Claim 15, wherein the coolant comprises water.

18. (Original) The therapy apparatus of Claim 15, wherein the coolant comprises air.

19. (Original) The therapy apparatus of Claim 14, wherein the element comprises a non-flowing material which is thermally coupled to the scalp.

20. (Original) The therapy apparatus of Claim 19, wherein the non-flowing material is pre-cooled prior to treatment of the brain.

21. (Original) The therapy apparatus of Claim 19, wherein the non-flowing material comprises a gel.

22. (Cancelled)

23. (Original) The therapy apparatus of Claim 1, wherein the element is adapted to diffuse the light prior to reaching the scalp.

24. (Original) The therapy apparatus of Claim 1, wherein the irradiated portion of the brain comprises the entire brain.

25. (Original) The therapy apparatus of Claim 1, wherein the apparatus is wearable over multiple concurrent days.

26. (Previously Presented) A therapy apparatus for treating brain tissue, the therapy apparatus comprising:

a light source positioned to irradiate at least a portion of a patient's head with light having a wavelength and power density which penetrates the cranium to deliver an efficacious amount of light to brain tissue, wherein the light has a power density of between about 0.01 mW/cm^2 and about 100 mW/cm^2 at a depth of approximately 2 centimeters below the patient's dura; and

a material which inhibits temperature increases of the head, the material adapted to contact the head and to apply pressure to at least the irradiated portion of the patient's head, thereby blanching the irradiated portion.

27. (Cancelled)

28. (Original) The therapy apparatus of Claim 26, wherein the light source is adapted to irradiate a predetermined area of the head.

29. (Original) The therapy apparatus of Claim 28, wherein the predetermined area of the head is a substantial fraction of the total area of the head.

30. (Previously Presented) A therapy apparatus for treating a patient's brain, the therapy apparatus comprising:

a light source adapted to irradiate at least a portion of the brain with an efficacious power density and wavelength of light, wherein the efficacious power density is between about 0.01 mW/cm^2 and about 100 mW/cm^2 at a depth of approximately 2 centimeters below the patient's dura; and

an element adapted to inhibit temperature increases at the scalp, wherein the element is adapted to apply pressure to at least a portion of the scalp to blanch the portion of the scalp, wherein at least a portion of the element is in an optical path of the light from the light source to the scalp.

31.-66. (Cancelled)